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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,173	01/27/2000	Hideki Ito	2298/3	9525

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EXAMINER

PATTERSON, MARC A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/492,173

Applicant(s)

ITO ET AL.

Examiner

Marc A. Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10, 14, 15, 19, 20, 24, 25 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10, 14, 15, 19, 20, 24, 25 and 29-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

NEW REJECTIONS

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 30 – 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami et al (U.S. Patent No. 4,264,667).

With regard to Claims 30 – 31, Murakami et al disclose a polyester film (column 7, lines 59 – 60) comprising a non – elastomeric polyester and polyester elastomer (terephthalic polyester and block copolyester; column 4, lines 52 – 54), the non – elastomeric polyester contained in the amount of 90 weight percent to 99.9 weight percent and the polyester elastomer contained in the amount of 0.01 weight percent to 10 weight percent (in a 99.4 : 0.6 ratio to 20 : 80 ratio by weight; column 4, lines 52 – 54); the film is shrinkable (shrinkage of within 50%; column 7, lines 55 – 58), and comprises a composition identical to that of the claimed invention as discussed above, therefore the claimed property of the film being heat shrinkable and having a shrinkage of 10 percent to less than 30% along its main shrinkage direction in water of 70 degrees Celsius for 5 seconds is inherent to the film disclosed by Murakami et al.

With regard to Claim 32, the non – elastomeric polyester comprises a dicarboxylic acid component (dibasic acid; column 2, line 54) and a diol (alkylene glycol; column 2, lines 61 – 62)

With regard to Claim 33, the polyester elastomer comprises a high melting point crystalline polyester segment (column 3, lines 16 – 18) and a low melting point soft polymer segment that has a molecular weight of 400 or more (column 3, lines 46 – 48).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 – 10, 15, 20, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al (U.S. Patent No. 4,985,538) in view of Shibuya et al (U.S. Patent No. 5,270,390).

With regard to Claims 7 – 10, 15, 20, 23 and 25, Fukuda et al disclose a heat shrinkable polyester film (column 6, lines 37 - 49) for making a label having a bonded portion (the film is used as a label of bottles; column 1, lines 10 – 19). Fukuda et al fail to disclose a film comprising 50 weight percent to 99.9 weight percent thermoplastic polyester resin and 0.1 weight percent to 50 weight percent polyester resin.

Shibuya et al teach a composition comprising 50 weight percent to 99.9 weight percent thermoplastic polyester resin and 0.1 weight percent to 50 weight percent polyester resin in a heat shrinkable polyester film (column 3, lines 29 - 41) for the purpose of making a heat shrinkable film having superior gas barrier property and cold resistance (column 3, lines 25 - 28). One of ordinary skill in the art would therefore have recognized the advantages of providing for

a composition comprising 50 weight percent to 99.9 weight percent thermoplastic polyester resin and 0.1 weight percent to 50 weight percent polyester resin in Fukuda et al, which is also a heat shrinkable polyester film. It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a composition comprising 50 weight percent to 99.9 weight percent thermoplastic polyester resin and 0.1 weight percent to 50 weight percent polyester resin in Fukuda et al in order to make a heat shrinkable film having superior gas barrier property and cold resistance as taught by Shibuya et al. Fukuda et al also fail to disclose a film having a shrinkage of 10 - 40% in the main shrinkage direction in water at 70 degrees Celsius for 5 seconds, and a film having a shrinkage of 50% or more in the main shrinkage direction in water at 95 degrees Celsius for 5 seconds, and a film having a shrinkage of 10% or less in the direction perpendicular to the main shrinkage direction in water at 95 degrees Celsius for 5 seconds. However, Fukuda et al disclose a film having a shrinkage of 30% or more in the main shrinkage direction when the film is put in water at 95 degrees Celsius for 5 seconds (column 6, lines 50 - 58), and a film having a shrinkage of 20% or less in the direction perpendicular to the main shrinkage direction when the film is put in water at 75 degrees Celsius for 5 seconds (column 6, lines 50 - 58) and teach that shrinkage is selected for the purpose of obtaining close adherence between the label and a vessel (column 6, lines 65 - 68, column 7, lines 1 - 2). Therefore, one of ordinary skill in the art would have recognized the utility of varying the shrinkage to obtain a desired adherence. Therefore, the adherence would be readily determined through routine optimization of shrinkage by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the shrinkage in order to obtain a desired adherence and therefore

adhesive retention, since the adherence would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Fukuda et al.

With regard to the claimed aspect of the film being a cap sealing label, the film is used as a label for bottles, therefore including a cap sealing label, as discussed above. With regard to the claimed aspect of samples being produced by the process of applying 1,3- dioloxane to a width of 2 mm on one side of the film at a first edge, the limitation is directed to a process limitation of the claimed invention, rather than a structural limitation, and is therefore given little patentable weight.

With regard to Claim 15, the film haze is 10% (column 5, lines 13 - 24) and the thickness is 50 gm (column 15, lines 60 - 61).

5. Claims 14, 19, 24 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al (U.S. Patent No. 4,985,538) in view of Shibuya et al (U.S. Patent No. 5,270,390) and further in view of Yoshinaka et al (U.S. Patent No. 4,996,291).

Fukuda et al and Shibuya et al disclose a heat shrinkable polyester film for making a label having a bonded portion as discussed above. With regard to Claims 14, 19, 24 and 29, Fukuda et al and Shibuya et al fail to disclose a label which is a cap - sealing label.

Yoshinaka et al teach that labeling and cap sealing are equivalent as articles comprising a heat shrinkable polyester film (column 1, lines 15 - 32) for the purpose of making an article which attaches closely as a wrapping (column 1, lines 17 - 32). It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have

provided for a label which is a cap – sealing label in Fukuda et al and Shibuya et al in order to make an article which attaches closely as a wrapping as taught by Yoshinaka et al.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 7 – 10, 15, 20, 23 and 25 as being unpatentable over Fukuda et al (U.S. Patent No. 4,985,538) in view of Shibuya et al (U.S. Patent No. 5,270,390) and 35 U.S.C. 103(a) rejection of Claims 14, 19, 24 and 29 as being unpatentable over Fukuda et al (U.S. Patent No. 4,985,538) in view of Shibuya et al (U.S. Patent No. 5,270,390) and further in view of Yoshinaka et al (U.S. Patent No. 4,996,291), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 8 of the remarks dated June 15, 2005, that the rejection is improper because if one of ordinary skill in the art would readily determine the shrinkages through routine optimization, the prior art would teach such; the claimed shrinkages were obtained through experimentation, Applicant argues, and the experimentation supports the argument that one of ordinary skill in the art would have had no expectation of success.

However, as stated above, Fukuda et al disclose a film having a shrinkage of 30% or more in the main shrinkage direction when the film is put in water at 95 degrees Celsius for 5 seconds (column 6, lines 50 - 58), and a film having a shrinkage of 20% or less in the direction perpendicular to the main shrinkage direction when the film is put in water at 75 degrees Celsius for 5 seconds (column 6, lines 50 – 58) and teach that shrinkage is selected for the purpose of obtaining close adherence between the label and a vessel (column 6, lines 65 – 68, column 7,

lines 1 – 2). Therefore, one of ordinary skill in the art would have recognized the utility of varying the shrinkage to obtain a desired adherence. Therefore, the adherence would be readily determined through routine optimization of shrinkage by one having ordinary skill in the art depending on the desired end use of the product. Furthermore, it is unclear why experimentation alone is an indication of an unexpected result.

Applicant also argues, on page 9, that the shrinkage of a film cannot be linearly determined by the proportions of the film, and that the shrinkage properties are not result effective properties

However, as stated above, Fukuda et al disclose a film having a shrinkage of 30% or more in the main shrinkage direction when the film is put in water at 95 degrees Celsius for 5 seconds (column 6, lines 50 – 58), and a film having a shrinkage of 20% or less in the direction perpendicular to the main shrinkage direction when the film is put in water at 75 degrees Celsius for 5 seconds (column 6, lines 50 – 58) and teach that shrinkage is selected for the purpose of obtaining close adherence between the label and a vessel (column 6, lines 65 – 68, column 7, lines 1 – 2); shrinkage is therefore a result effective variable, although it cannot be determined linearly.

Applicant also argues on page 9 that combining a polyester elastomer with Fukuda et al would likely result in deterioration of properties, and that Shibuya et al have inferior properties compared to Fukuda et al, and that PVDC is an essential component of Shibuya et al and is not an essential component of Fukuda et al.

However, Fukuda et al does not disclose that addition of an elastomer leads to deterioration of properties, and it is unclear why the properties of Shibuya et al are necessarily

inferior. Furthermore, as stated above, one of ordinary skill in the art would have been motivated to provide for the composition of Shibuya et al in Fukuda et al, although PVDC is not an essential component of Fukuda et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc Patterson 9/6/05
Marc A. Patterson, PhD.
Examiner
Art Unit 1772